

We claim:

1. A composition comprising an oil-soluble scale inhibitor in a solvent, said oil-soluble scale inhibitor comprising a scale inhibitor and an alkyl primary amine.
2. The composition of claim 1 wherein the alkyl primary amine is selected from the group consisting of a primary alkyl primary amine, a secondary alkyl primary amine, a tertiary alkyl primary amine, and mixtures thereof.
3. The composition of claim 1 wherein the alkyl primary amine has a concentration in a range of about 2.5 wt. % to about 25 wt. %.
4. The composition of claim 1 wherein the solvent is selected from the group consisting of esters, aromatic hydrocarbons, aliphatic cycloparaffinic hydrocarbons, paraffin hydrocarbons and low aromatic distillates, terpenes, linear and alpha olefins, fatty acids, natural oils, and mixtures thereof.
5. The composition of claim 1 wherein the solvent is selected from the group consisting of 2-ethyl hexanol, butyl triglycol, isopropanol, triethylene glycol, and 2-butoxyethanol.
6. The composition of claim 2, wherein the alkyl primary amine is 2-ethylhexyl amine.
7. The composition of claim 1 wherein the scale inhibitor comprises phosphonic acids.
8. The composition of claim 7 wherein the scale inhibitor has a concentration in a range of about 1 wt. % to about 30 wt. %.
9. The composition of claim 8, wherein the scale inhibitor has a concentration preferably in a range of about 2.5 wt. % to about 5 wt. %.

10. The composition of claim 2 wherein the primary alkyl primary amine contains six or more carbon atoms.
- 5 11. The composition of claim 1 further comprising an additive selected from the group consisting of formic acid, acetic acid, 2 ethyl hexanol, monoethylene glycol, butyl triglycol, isopropyl alcohol, triethylene glycol, and 2-butoxyethanol.
- 10 12. The composition of claim 11 wherein the additive has a concentration in a range of about 2.5 wt. % to about 8 wt. %.
- 15 13. The composition of claim 1 wherein the proportions of alkyl primary amine to scale inhibitor are between the ratios 5:1 and 1:1.
- 20 14. A method of treating a producing oil well susceptible to scale formation comprising the steps of injecting into the well an oil soluble scale inhibitor where the inhibitor comprises a scale inhibitor and an alkyl primary amine.
- 25 15. The method of claim 14 wherein the alkyl primary amine is selected from the group consisting of a primary alkyl primary amine, a secondary alkyl primary amine, a tertiary alkyl primary amine, and mixtures thereof.
16. The method of claim 14 wherein the alkyl primary amine has a concentration in a range of about 2.5 wt. % to about 25 wt. %.
17. The method of claim 15 wherein the alkyl primary amine is 2-ethylhexyl amine.
18. The method of claim 14 further comprising the step of introducing the oil soluble scale inhibitor into a solvent wherein the solvent is selected from the group consisting of esters,

aromatic hydrocarbons, aliphatic cycloparaffinic hydrocarbons, paraffin hydrocarbons and low aromatic distillates, terpenes, linear and alpha olefins, fatty acids, natural oils, and mixtures thereof.

- 5     19.     The method of claim 14 wherein said scale inhibitor comprises phosphonic acids.
20.     The composition of claim 19 wherein the scale inhibitor has a concentration in a range of about 1 wt. % to about 30 wt. %.
- 10 21.     The composition of claim 20, wherein the scale inhibitor has a concentration preferably in the range of about 2.5 wt. % to about 5 wt. %.
22.     The method of claim 21 wherein the solvent is selected from the group consisting of 2-ethyl hexanol, butyl triglycol, isopropanol, triethylene glycol, and 2-butoxyethanol.
- 15 23.     The method of claim 14 further comprising the step of injecting the oil soluble scale inhibitor in conjunction with the step of injecting other additives selected from the group consisting of formic acid, acetic acid, 2 ethyl hexanol, monoethylene glycol, butyl triglycol, isopropyl alcohol, triethylene glycol, and 2-butoxyethanol.
- 20 24.     The method of claim 23 wherein the additive has a concentration in a range of about 2.5 wt. % to about 8 wt. %.
- 25 25.     The method of claim 14 wherein the alkyl primary amine in proportion to the scale inhibitor is between a ratio of about 5:1 to about 1:1 when the oil soluble scale inhibitor is injected into the well.
26.     A method of treating a well comprising the step of injecting an oil soluble scale inhibitor into an oil system having a flow of oil or gas to deliver the inhibitor to water based scale.